U.S. Department
of Transportation
**Research and
Special Programs
Administration**

400 Seventh Street, S.W.
Washington, D.C. 20590

JUN 7 2000

DOT-E 9402
(FOURTH REVISION)

EXPIRATION DATE: April 30, 2002

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: Arbel-Fauvet-Rail (AFR), Paris France
(U.S. Agent: Mary-Hoyt Joyce,
Chevy Chase, Maryland)

(See Appendix A to this document for a list of additional grantees)

2. PURPOSE AND LIMITATION: This exemption authorizes the transportation in commerce of certain Division 2.1 and 2.2 gases in non-DOT specification IMO Type 5 portable tanks. This exemption provides no relief from any regulation other than as specifically stated herein.

3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.

4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR § 173.315 and § 178.245.

5. BASIS: This exemption is based on the application of AFR dated April 24, 2000, submitted in accordance with § 107.109 and supplemental information dated May 31, 2000.

6. HAZARDOUS MATERIALS (49 CFR § 172.101):

Hazardous materials description -- proper shipping name	Hazard Class/ Division	Identification Number	Packing Group
Butane and butane mixtures	2.1	UN1011	N/A
1,1-Difluoroethane *or* Refrigerant gas R 152a	2.1	UN1030	N/A
Isobutane	2.1	UN1969	N/A
1-Chloro-1,1-Difluoroethanes *or* Refrigerant gas R 142b	2.1	UN2517	N/A

Hazardous materials description -- proper shipping name	Hazard Class/ Division	Identification Number	Packing Group
Dichlorodifluoromethane *or* Refrigerant gas R 12	2.2	UN1028	N/A
Chlorodifluorobromomethane *or* Refrigant gas R 12B1	2.2	UN1974	N/A

7. SAFETY CONTROL MEASURES:

a. PACKAGING - Packaging constructed prior to July 1, 1986 is a non-DOT specification portable tank, mounted in an ISO frame, designed and constructed in accordance with Fauvet-Girel drawings nos. Co 167873, Co 167885, Co 167899, and other drawings, technical specifications and calculations on file with the Office of Hazardous Materials Exemptions and Approvals (OHMEA), and in compliance with the following:

1. Code - Complies with DOT Specification 51 except that tanks are not ASME Code "U" stamped and have bottom outlets; IMO Type 5.

2. Insulation - None; Sunshield - optional.

3. Water capacity (U.S. Gallons) - 5,283.

4. Material - French standard NF A 36 205, designation A 52 FP, Yield strength - 53,228 psi; Tensile strength -79,770; elongation - 22%.

5. Tank Size (inches) (outside dia.) 86.61 X (length) 230.31 X (thickness) 0.456(min.)

   Head Thickness - 0.413 (min.)
   Weld Joint Efficiency - 1.0
   Corrosion Allowance - 0.0
   Number of Baffles - 3

6. Design Pressure (PSIG) - 197.25
   Note: Design pressure means "maximum allowable working pressure (MAWP)" as used in the ASME Code.

7. Test Pressure, Minimum (PSIG) - 295.88.

8. Openings - One(1) - 9.2 inch diameter opening for the pressure relief devices on the top; one(1) - 24.8 inch diameter opening for the manhole and one(1) - 8.6 inch diameter opening for the inspection opening on the heads; one(1) 6.6 inch diameter opening for the liquid phase valve and one(1) - 6.6 inch diameter opening for the vapor phase valve on the bottom. NOTE: Each bottom outlet valve must be provided with a shear section that meets the requirements of § 178.337-12.

9. Tank surface area (square feet) - 464.

10. Pressure Relief Devices - Two (2) - 2 1/2 inch diameter spring loaded safety relief valves in series with and outboard of one (1) - 3 inch diameter rupture disc all set at 217 psig. Total relief device capacity is 1,341, 957 SCFH.

11. G-Loadings: Vertical down 2 : Vertical up 2 : Longitudinal 2 : and Transverse 2 .

12. Maximum Gross Weight (pounds:) - 67,196.

13. Maximum Commodity Weight (pounds) - 52,315.

14. Tare Weight (pounds) - 14,881.

15. Design Specific Gravity - 1.19.

16. Design Temperature (°F) - 131.

b. Packaging constructed after June 30, 1986 is identical to that described in paragraph 7.a. above with the following exceptions:

1. Code - Each tank must be ASME Code "U" stamped; IMO Type 5;

2. Material - SA-612 carbon steel; and

3. Pressure Relief Devices - One (1) - 3 inch diameter spring loaded safety relief valve in series with and outboard of one (1) - 3 inch diameter rupture disc all set at 197.25 psig. Total relief device capacity is 976,450 SCFH.

c. TESTING -

1. Hydrostatic test certificates for each tank must be maintained by the owner or manufacturer at its principal business office and be made available to any representative of the DOT upon request.

2. Each tank must be (i) visually inspected prior to each trip to insure that it has not been damaged on the previous trip; and (ii) retested and reinspected once every five years in accordance with § 173.32 as prescribed for DOT Specification 51 portable tanks.

8. SPECIAL PROVISIONS:

a. A person who is not a holder of this exemption who receives a package covered by this exemption may reoffer it for transportation provided no modifications or change are made to the package and it is reoffered for transportation in conformance with this exemption and the HMR.

b. A current copy of this exemption must be maintained at each facility where the package is offered or reoffered for transportation.

c. No product may be shipped that has venting requirements exceeding that specified in paragraphs 7.a. or 7.b. The venting capacity required for each product must be determined by the flow formulas contained in Compressed Gas Association (CGA) pamphlet S-1.2.

d. A test report documenting a satisfactory ISO prototype test for this tank design must be on file with the OHMEA prior to the first shipment.

e. The tank must be filled by weight in accordance with the provisions of § 173.315.

f. Portable tanks may not be transported in container-on-flat car (COFC) or trailer-on-flat car (TOFC) service except under conditions approved by the Associate Administrator for Safety, Federal Railroad Administration.

g. DOT-E 9402 must be stamped on the metal manufacturer's data plate on the line which reads "U.S. DOT Specification No.".

h. For each portable tank, the manufacturer must prepare a certificate which must be signed by a responsible official of the manufacturer and an independent inspection agency certifying that the portable tank is designed and constructed in accordance with the ASME Code and this exemption. The certificate for the first portable tank fabricated must be submitted to the OHMEA prior to the initial shipment.

i. MARKING - Each portable tank must be plainly marked on both sides near the middle, in letters at least two inches high on a contrasting background, "DOT-E 9402".

9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle, rail freight, cargo vessel.

10. MODAL REQUIREMENTS:

A current copy of this exemption must be carried aboard each cargo vessel or motor vehicle used to transport packages covered by this exemption.

11. COMPLIANCE: Failure by a person to comply with any of the following may result in suspension or revocation of this exemption and penalties prescribed by the Federal hazardous materials transportation law, 49 U.S.C. 5101 et seq:

- All terms and conditions prescribed in this exemption and the Hazardous Materials Regulations, 49 CFR Parts 171-180.
- Registration required by § 107.601 et seq., when applicable.

Each "Hazmat employee", as defined in § 171.8, who performs a function subject to this exemption must receive training on the requirements and conditions of this exemption in addition to the training required by § 172.700 through § 172.704.

No person may use or apply this exemption, including display of its number, when the exemption has expired or is otherwise no longer in effect.

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12. REPORTING REQUIREMENTS:

a. The holder or parties to this exemption, as identified in paragraph 1 above and Appendix A, must contact the OHMEA immediately after any of the tanks covered by this exemption are sold to another party.

b. Shippers who ship under the terms of this exemption must report any incident involving loss of contents of the tanks described herein to the OHMEA as soon as practicable. (Sectopms 171.15 and 171.16 apply to any activity undertaken under the authority of this exemption.)

Issued at Washington, D.C.:

JUN 7 2000

Robert A. McGuire
For Acting Associate Administrator
for Hazardous Materials Safety

(DATE)

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Research and Special Programs Administration, Department of Transportation, Washington, D.C. 20590. Attention: DHM-31.

The original of this exemption is on file at the above office. Photo reproductions and legible reductions of this exemption are permitted. Any alteration of this exemption is prohibited.

Copies of exemptions may be obtained from the AAHMS, U.S. Department of Transportation, 400 7th Street, Washington, DC 20590-0001, Attention: Records Center, 202-366-5046.

PO: sln

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The following are hereby granted party status to this exemption based on their application(s) submitted in accordance with § 107.107 or § 107.109, as appropriate:

Company Name City/State	Application Date	Issue Date	Expiration Date
NACCO, S.A., Paris, France, (U.S. Agent: Wilhelmsen Lines, (U.S.A.) Inc, Baltimore, MD)	4/19/2000	JUN 7 2000	4/30/2002
ALGECO, Paris, France (U.S. Agent: Mary-Hoyt Joyce, Chevy Chase, MD)	4/24/2000	JUN 7 2000	4/30/2002
Exsif SA, Versailles, France (U.S. Agent: Exsif, (US), Inc., Houston, TX)	4/23/2000	JUN 7 2000	4/30/2002
Elf Atochem SA Paris, France (U.s. Agent: Elf Atochem North America, Inc., Philadelphia, PA)	4/17/2000	JUN 7 2000	4/30/2002

R. Ryan Posten

Robert A. McGuire
Acting Associate Administrator for
Hazardous Materials Safety